Instruction Manual

CS-200 Series

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Introductions

This CS-200 series, the latest state of the art digital conference control system with superb performance and elegant design, can be used for various conferencing.

This conference system has the most advanced built-in digital control mode with 10 chairman microphones and 999 delegate microphones (the number of microphones used depend on actual requirement). The unique features are as follows:

- Sound Effect Processing Amplified Mode
- Fast speed dome Positioning Control Mode
- Graphic Control Software Communication Mode

Above features are capable of meeting your demands under any circumstance.

With high-speed 360° endless rotation and auto-returning functions enable High speed dome being applied in various difficult and multi-spot image positioning. RS-485 communication interface provides remote control. 128 programmable preset positions can be precisely located with the target position. Also dome IP speed dome has automatic surveillance functions for different paths defined by you.

With its unique “Self-Detecting” function, when the power is on, the system will be executed automatic detection of all chairman/delegate units whether it’s normal or not. Therefore, you could judge the system whether it’s normal timely.

Higher reliability is the utmost importance factor in the process of R&D of this conference system. Each conference unit and its related products are through careful assembly and strict test in our ISO 9001 factory.

With the excellent performance, “High reliability” and “Reasonable price” make it indispensable tools of your conferencing.

Features

Main control unit of the Conference System

1. Digital Control Capability: Chairman's Unit x10, Delegate's Unit x 999
2. ID Settings of the Conference Unit: 10-Bit Dip Switch Adopted.
3. Numbers Ranged From 001 ~ 999, Totally 999 Delegate Units.
4. ID Position Code of Delegate Unit: 001~999, Totally 999 Codes.
5. ID Position Code of Chairman Unit: ＊01~ ＊10, Totally 10 Codes.
6. 1x LCD (20*4) And 5 X LED Setting Buttons: MODE, UP, DN, STEP and SAVE which control MIC Mode and the Volume of the Conference.
7. Built-in digital volume control mode
8. Built-in auto-image tracing & positioning control mode.
9. Built-In Software Control Communication Interface.
10. Built-in front sound mixing amplifier mode.
11. Built-in high pressure signal transfermode

Chairman Unit

1. Table-top and Flush-mounted types
2. Equipped TALK and Control buttons（functions are as same as the control buttons on the main control unit）.
3. Equipped with the digital volume control mode for adjusting the volume of the conference
4. Equipped with LCD(24*2) mode (Only for CS-200DU/CU)
5. It can be plugged at any position in the system.
6. Maximum microphones: 10 units

Delegate Unit

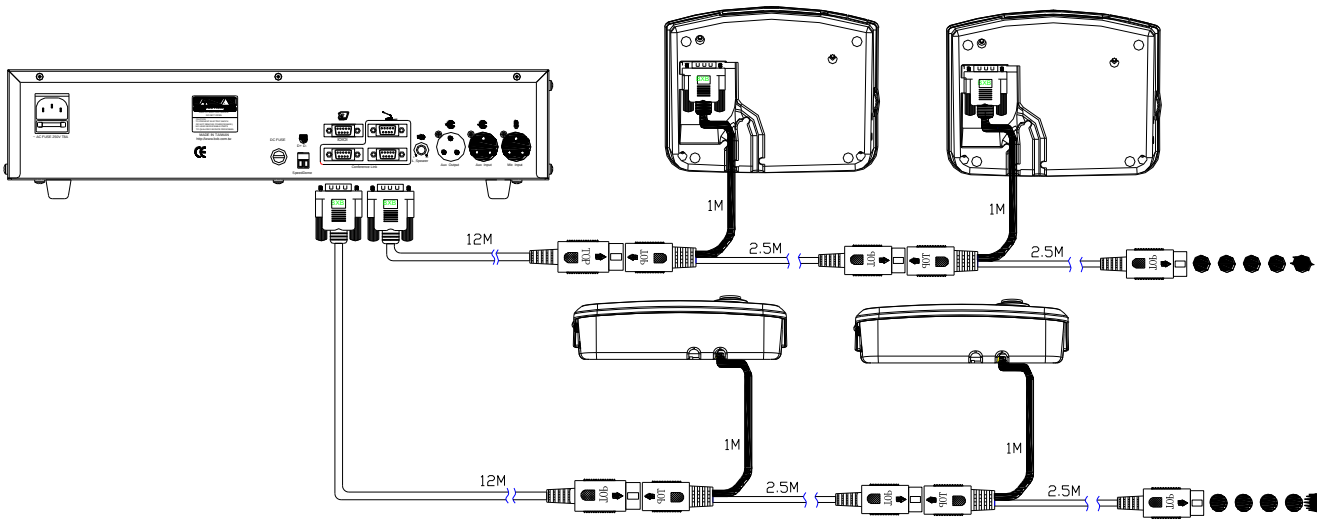
1. Desktop, Built-In and Hand-Held Types.
2. Equipped with TALK/Request button.
3. Equipped With LCD(24*2) Mode **(**Only for CS-200DU/CU**)**
4. Maximum MIC: 999 units

Safety Instructions

1. Please read and observe these instructions before installing and using the apparatus.
2. Use only accessories specified by the manufacturer. The manufacturer is not liable for damage caused by the use of non-specified accessories.
3. Install the apparatus and its accessories carefully. Strike and fierce shaking may damage the apparatus.
4. Make sure the power cord is fixed properly.
5. Do not overload wall outlets and extension cords as this can result in a risk of fire or short circuit.
6. To reduce the risk of damage from lightning strikes, it is important that all electric cables should be bonded to the same grounding point.
7. Do not block any ventilation openings to prevent overheating and malfunction.
8. Do not expose the apparatus to rain or moisture.
   Humidity may lead inside components to damage. Appropriate shelter is necessary when placing it outside (Best working environment: Temperature 0°C ~ 40°C <32°F ~ 104°F>, humidity below 90%).
9. Please do not switch on and off the apparatus rapidly.
   Rapid switch on and off the apparatus should be avoided all the time to prevent inside sensitive electronic circuits from being damaged by surges.
10. Do not clean the apparatus and its accessories with chemical solvents. Use only a clean, dry/dampish cloth.
11. Refer to maintenance technician when the apparatus has been damaged in any way, such as:
    A• power-supply cord or plug is damaged
    B• liquid has been spilled in
    C• has been exposed to rain or moisture
    D• has been dropped
    E• objects have fallen into the apparatus
    F• does not operate normally
12. Note: When the printed circuit board is going through electric static treatment, correct ESD safety precaution and grounding should be assured.
13. Note: Before connecting the apparatus to main AC, please select the supply voltage in accordance with the wall voltage in your country to prevent damage. Refer to Installation and Setting (Page 8) for selecting.
14. Warning: Do not disassemble or remodel the product, as these actions may lead to electrical shock or damage. The guarantee on the product will become null if the product is ever disassembled.

Installations & Connections

1.Connection between Conference Main control unit & Chairman/Delegate MIC.



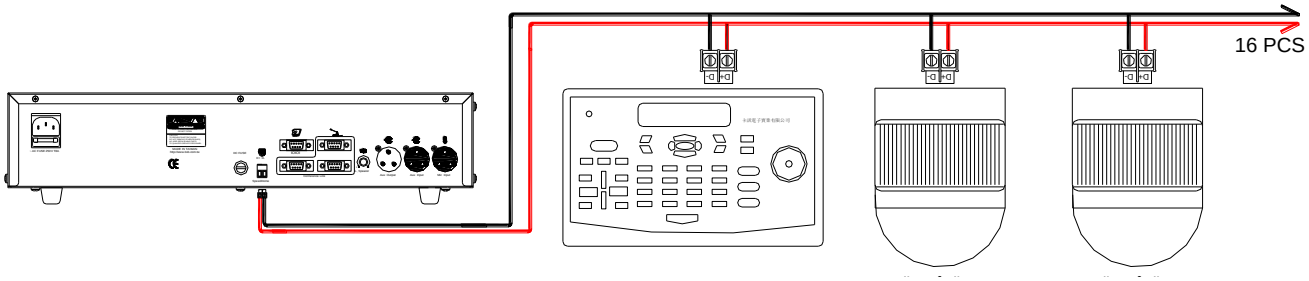
1.1 There are three groups of microphone port on the main control unit, which can be connected randomly.

1.2 Chairman/delegate unit is equipped with hidden connecting terminal. While connecting, CS-200YC fast cord is adopted to form hidden wiring with simple and beauty effect.

1.3 The chairman microphone can be plugged at any place without order limitation.

1.4 Please make sure the power is off before unplugging the unit.

2. Connection between Main control unit & High speed dome Positioning System



2.1 One group of fast socket terminal on main control unit connected with speed dome control keyboard is adopted with Double core parallel connection（D+, D-）.

2.2 Please ensure the plug position correctly to avoid mal-operating while connecting between main control unit and speed dome control keyboard.

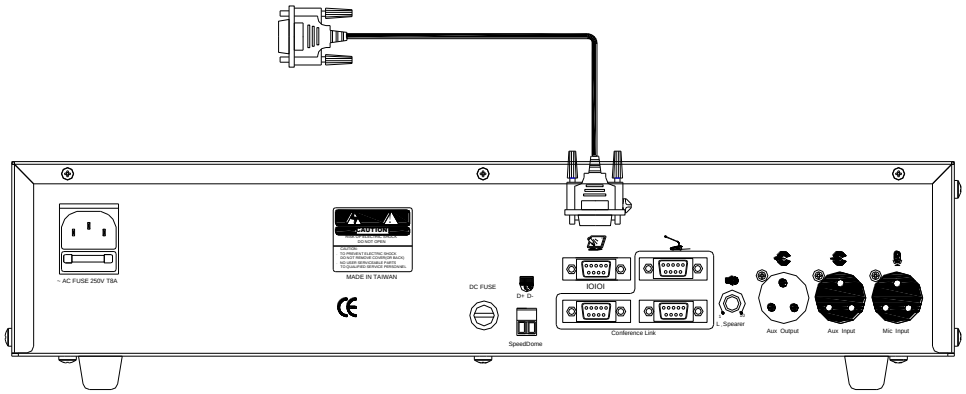
2.3 Cords connected between control keyboard and speed dome are adopted as Double core parallel connection（D+, D-）. Maximum 16 speed dome cameras can be connected.

2.4 If connecting cord is needed to be made by yourself, please refer to the Appendix- control plug instruction.

2.5 The position of RS-485 connector of speed dome can the plug position, please refer to the Appendix.

2.6 The material of control cords could be referred to the Appendix.

3. Basic Connection between Conference Main control unit & Software Control System



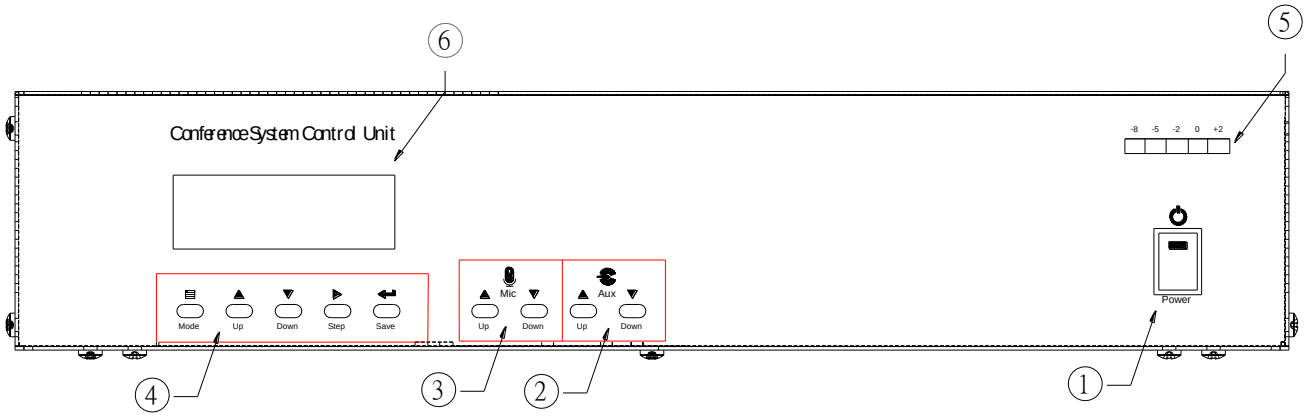
3.1 Cords connected between Graphic control software server and CS-200 MU is adopted as 9P D type parallel connecting cord. (RS-232 cable)

3.2 Please ensure the connection between Graphic control software server and CS-200MU is adopted as COM1 port (which is not being used by other machines).

CS-200 Operation & Function Instructions

1.Main control unit's Front/Rear Panel Functions Instructions

1.1 【Front Panel】



1. POWER: power switch。
2. AUX volume control: Adjust the volume of the equipment connected to the AUX input jack
3. MIC volume control: Adjust the volume of the microphone connected to the microphone input jack
4. Conference function control :

    MODE: Mode-changing

    UP: step up of parameter change /volume up

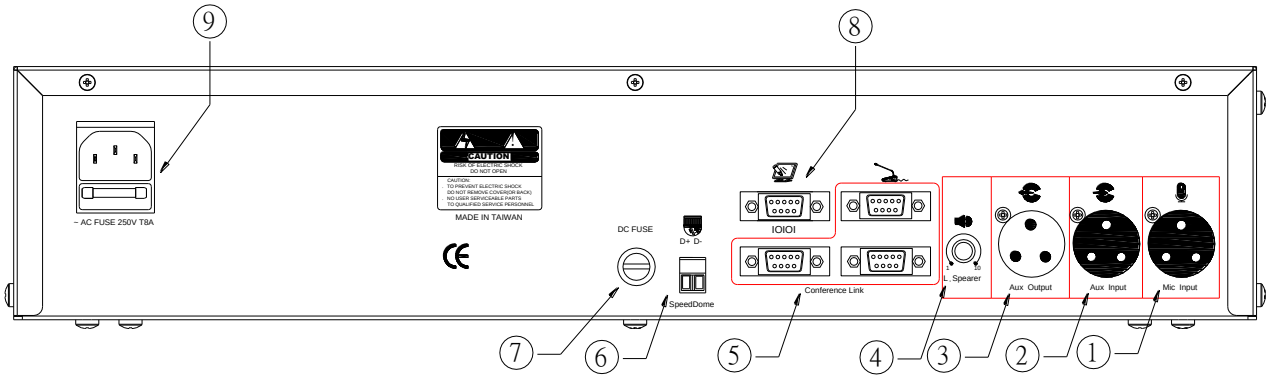
    DN: step down of parameter change /volume down

    STEP: selecting parameter setting of the IP speed dome from left to right.

    SAVE: save the settings.

5. Volume output LED indicator lamp.
6. LCD（20×4）

1.2 【Rear Panel】



1.➝ MIC Input: dynamic microphone input terminal（XLR）◦

2.➝ AUX Input: external sound input terminal (XLR) ◦

3.➝ AUX Output: sound output terminal (XLR) ◦

4.➝ L. Speaker-VR: master volume-control of built-in loud speaker of chairmen/delegate unit.

5.➝ LINK 1 ~ 3: Connect to conference microphone unit port.

6.➝ SPEED DOME connection: control port. (D+, D-)

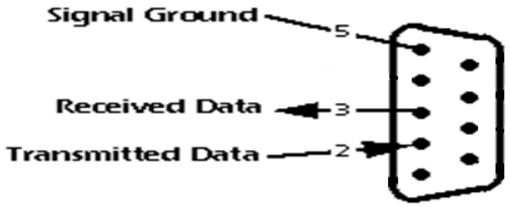
7.➝ Conference main control unit DC power fuse seat（DC 250V/8A）.

8.➝ PC DATA: RS-232 control port to Graphic control software server.

2nd foot: Transmitted Data (Tx)

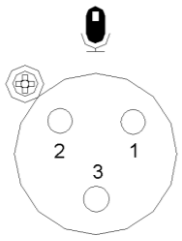
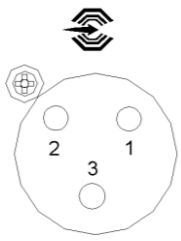
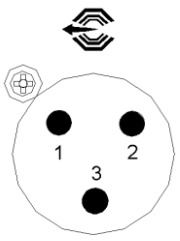
3rd foot: Received Data (Rx)

5th foot: Signal Ground(G)



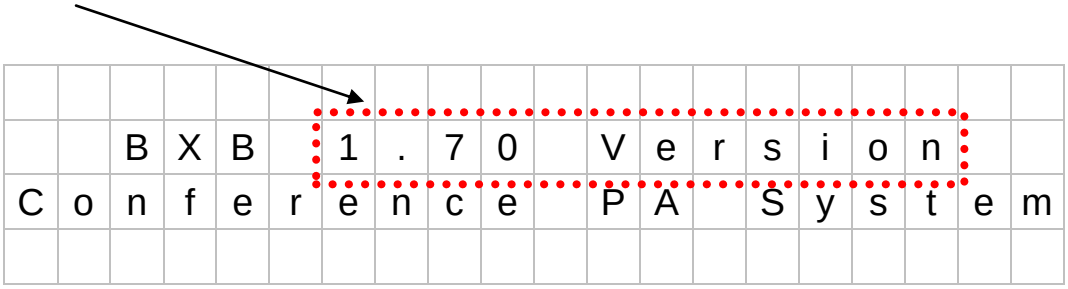
9.➝ AC 110V/220V inlet. Equipped with AC overload protection fuse, one protection fuse and one stand by fuse（AC 250A/8A ）under the socket.

※Audio input/ output feet info

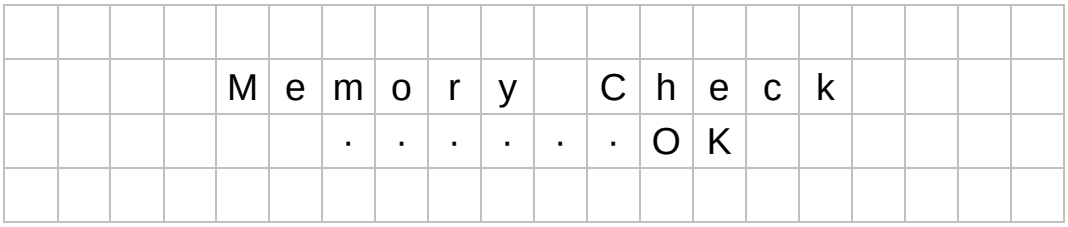
 Mic Input	 Aux Input	 Aux Output
1:Ground 2:Hot(+) 3:Cold(-)	1:Ground 2:Sigal(Aux) 3:Empty	1:Ground 2:Sound(Aux) 3:Empty

2.Power On

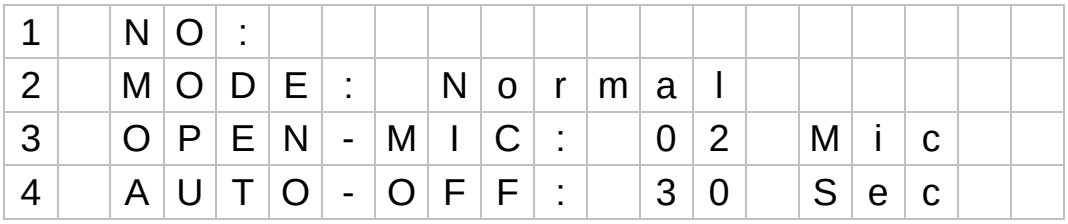
2.1 After confirming all the above adjustments and control wiring is done. Switch the power on and the LCD will be displayed the following information (including the software version)：



2.2 Later, the system will be in connection test mode, the system will start scanning all connected conference microphones; LCD will be displayed the following information:



2.3 When connection test mode is completed, LCD will be displayed the following information and turn to the preset menu page.



NOTE：

1. When main control unit is ON, this conference system will be executed microphone connection test. At this moment, the red LED of microphone will be constantly on; 5 seconds later, if the connection was wrong, it will be flashing. It means the connection is failure.
2. In this case, the power of main control unit should be switched off and check whether the microphone connection is correct or not and then switch it on again. If the red LED of the microphone is constantly on for more than 5 seconds, and the connection of the microphone is normal.
3. Press the talk button of the chairman unit or any delegate unit, the red LED of microphone can be cleared, or wait for 30 seconds until the test mode of the system is finished, and then the conference begins.

3.LCD Instructions

1		N	O	:													
2		M	O	D	E	:		N	o	r	m	a	l				
3		O	P	E	N	-	M	I	C	:		0	2		M	i	c
4		A	U	T	O	-	O	F	F	:		3	0		S	e	c

→ ◯,1 → ◯,2 → ◯,3 → ◯,4

5		S	P	E	E	D		D	O	M	E		S	E	T	T	I	N	G
		M	I	C				D	O	M	E				A	D	R		
	(	0	0	1	)				0	1					0	0	1		

→ ◯,5

6		S	P	E	E	D		D	O	M	E		M	O	D	E			
(	N	o	n	e	)		B	u	t	t	o	n		V	o	i	c	e	

→ ◯,6

1. ➝ NO: Using microphone's "ID code": **3** groups of ID code are displayed per page.
   i. Chairman microphone's"ID code":✳✳**1 ~ ✳10**
   ii. Delegate microphone's"ID code":**001 ~ 999**
2. ➝ MODE:
   i. **Normal**：Normal Mode
   ii. **Override**：Override Mode
   iii. **Chairman**：Chairman Mode
   iv. **FIFO**：First in first out (FIFO) mode
3. ➝ OPEN-MIC: three modes of limiting the number of simultaneously usable units: **1~30**, all open and chairman mode.
4. ➝ AUTO-OFF (Automatic Mic-off): **10 ~ 99** second & and manual turn off.
5. ➝ SPEED DOME SETTING: Displays and settings of Speed Dome & chairman/delegate microphone. ID code
6. ➝ SPEED DOME MODE:
   i. **None:** Stop Auto-Image Tracing & Positioning function
   ii. **Button:** When pressing the "Talk" button, the auto image tracing and positioning mode is activated.
   iii. **Voice:** When using more than two microphones, speed dome will be automatically detected the voice for executing auto image tracing and positioning mode.

4.System's Operations & Settings

4.1 Using MIC. ID Checking

4.1.1 When the conference unit is using, the red LED of microphone will be constantly on. Meanwhile, its ID code will be displayed on the LCD of main control unit.

4.1.2 Less than 3 using microphones, you can see the ID code on the preset menu.

1		N	O	:		0	0	1		0	0	2		0	0	3			
2		M	O	D	E	:		N	o	r	m	a	l						
3		O	P	E	N	-	M	I	C	:		0	2		M	i	c		
4		A	U	T	O	-	O	F	F	:		3	0		S	e	c		

4.1.3 Over 3 using microphones," ← → " icon will be displayed on the up-right of the LCD. By pressing the " MODE " button → LCD screen will be showed " ▫ " → press "UP" and "DN" button to check the ID code of using microphone.

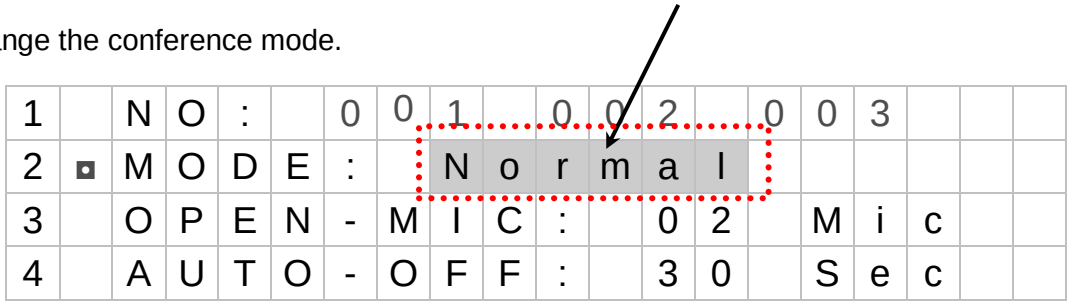
1	▫	N	O	:		0	0	1		0	0	2		0	0	3		←	→
2		M	O	D	E	:		N	o	r	m	a	l						
3		O	P	E	N	-	M	I	C	:		0	2		M	i	c		
4		A	U	T	O	-	O	F	F	:		3	0		S	e	c		

4.1.4 The symbol of" ▫ " icon indicates the operating and setting function is activated. You could repeat this action to operate and set up all conference modes.

Note: All the figures appeared on this manual is only for samples explanation. Each main control unit has been through a series of QC test before leaving factory. Since the default value is not identical, users can change the settings simply followed by the instruction manual.

4.2 Conference Mode Settings

4.2.1 Press"MODE" button → move" ◘" icon to MODE → **Normal** (is flashing) → press"UP" or "DN" →change the conference mode.



4.2.2 The following conference modes can be set.

※The chairman, who is not subject to the following conference mode, can speak anytime freely.

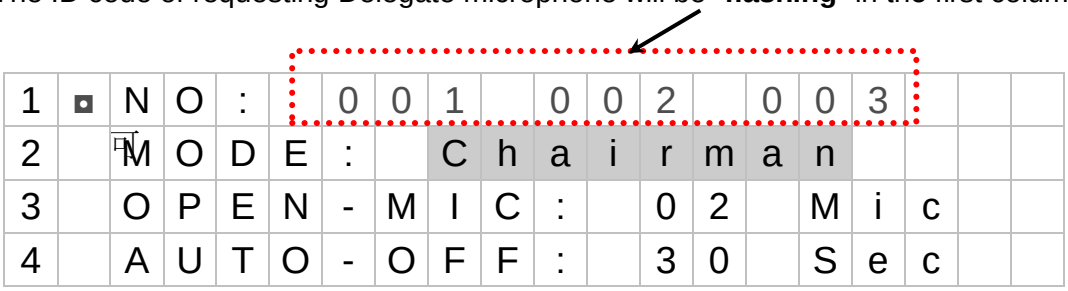
Normal Mode：

Delegates can press the talk button and speak within the limiting the number of simultaneously usable units. Press the "Talk" button again to turn it off after speaking.

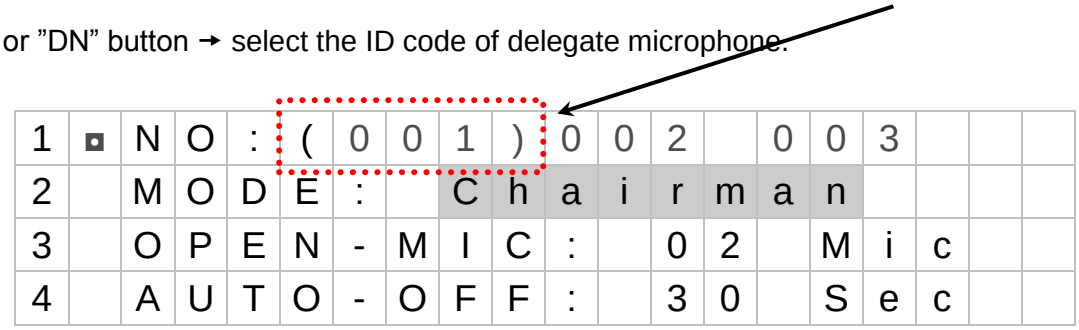
Chairman Mode：

Only the Chairman unit has the right to speak. Of course, chairman could also permit the delegates unit speaking while pushing the "TALK" button by three ways (main control unit, graphic control server and Chairman unit).

The ID code of requesting Delegate microphone will be "**flashing**" in the first column.



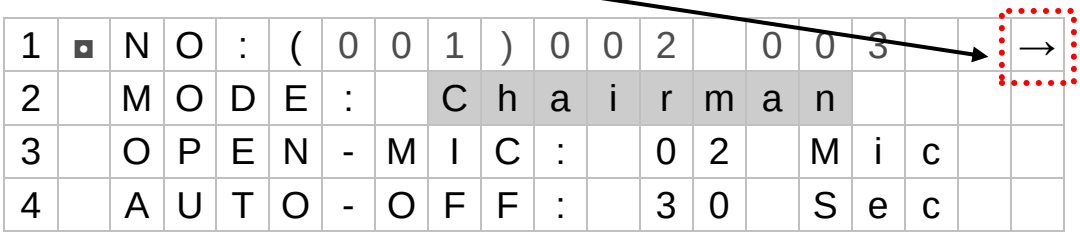
Press "STEP" button to enter delegate-selecting mode. You'll see （×××） icon. → press "UP" or "DN" button → select the ID code of delegate microphone.



Press"STEP" button again → the delegate microphone is allowed to talk. You'll see the selecting unit of its ID code will be stopped flashing and delegate can talk now. Please repeat this steps if more delegates request to talk. （**this step can also be executed**

simultaneously by pressing the 5 multi-function buttons of chairman unit）.

When the numbers of speaker and requesting speakers are over three, you will see this arrow icons →、←、↔ displayed on LCD of Chairman unit and main unit, indicating →（next page）、←（last page）、↔（continued last and next pages）.



Override Mode：

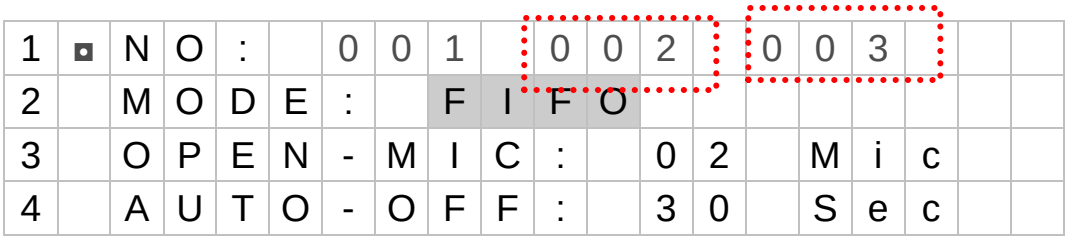
Example 1: If you limit the number of simultaneously usable delegate microphone as **1**, while the **"TALK"** button of the 2nd delegate unit has been pressed, the last using microphone will be switched off automatically.

Example 2: If you limit the number of simultaneously usable delegate microphone as **3,** while the "**TALK"** button of the 4th (5th) delegate unit is been pressed, the 1st (2nd) delegate unit will be switched off. It will be always limited **3** simultaneously usable delegate microphones. Therefore, you can follow the same rule to set up if the numbers of simultaneously usable delegate microphone ranged from **1~30**.

※The chairman, who is not subject to the conference mode, can speak anytime freely.

FIFO Mode：

If the limiting numbers of simultaneously usable delegate microphone are **1,** while the **"TALK"** button of the **2nd delegate unit**, **the prepared speaker,** is been pressed, its indicator lamp & ring of light are flashing with red color; as for the **3rd delegate unit or more units**, theirs "TALK" button LED are flashing with orange color.; When the 1st delegate finishes speaking, the 2nd one will be automatically switched on, and the 3rd one will become the **prepared speaker**. The chairman microphone is not restricted to this and can speak freely.

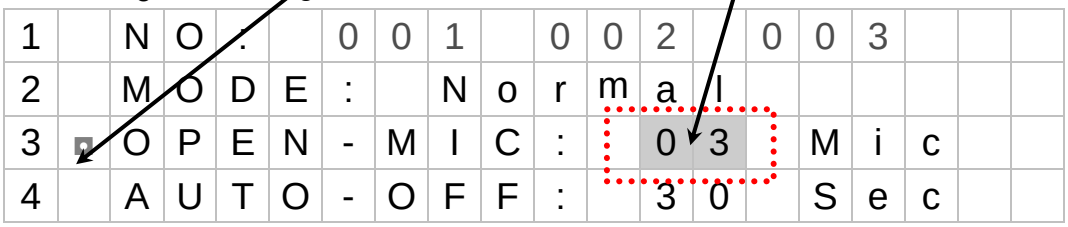


● At this time, chairman mode operation can still be applied to select prioritized speaker by overriding the FIFO mode.

4.3 Settings of the limiting number of simultaneously usable delegate microphone

4.3.1 You can select “Open- Mic: ALL Mic” mode (see below) or set up the limiting number of simultaneously usable delegate microphone ranged from 1~30.

4.3.2 Press ”MODE” button ➙ move” ▫” to OPEN –MIC mode ➙ No. **03 Mic** will be flashing ➙press ”UP” or ”DN” button again ➙ change the No.



4.3.3 The limiting number of simultaneously usable delegate microphone ranged from 1~30.

4.3.3.1 OPEN –MIC：1 Mic ⇨ limiting the number of simultaneously usable delegate unit: **1**

4.3.3.2 OPEN –MIC：30 Mic ⇨ limiting the number of simultaneously usable delegate unit: **30**

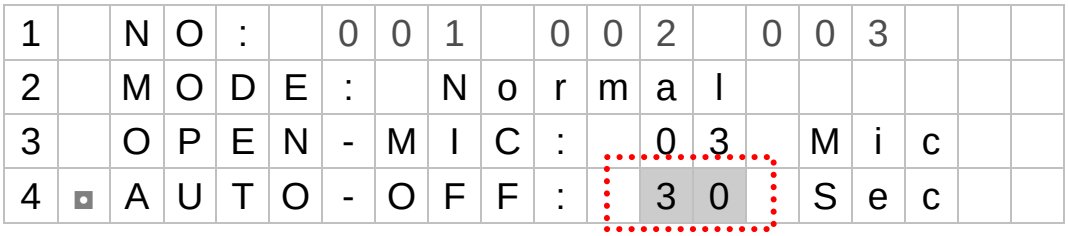
4.3.3.3 OPEN –MIC：ALL Mic ⇨ limiting the number of simultaneously usable delegate unit: **None**

4.3.3.4 OPEN –MIC：REQUEST ⇨ In Chairman mode, this column will be displayed ” REQUEST, ” meaning delegates need to press button to request to speak.

4.4 Time Settings (Automatic Mic Off)

4.4.1 The function of automatic mic off (from 10~99 sec) could be set up after speaking finished, when times up, the delegate unit will be automatically switched off or be manually switched off by pressing the “TALK” button.

4.4.2 Press ”MODE” button ➙ move “▫” to AUTO –OFF mode ➙ No. **30 Sec** will be flashing ➙ press ”UP” or ”DN” button ➙ change the No.



4.4.3 The function of automatic mic off (from 10~99 sec).

4.4.3.1 AUTO –OFF：10 Sec ⇨ **10** sec later if not speaking, the delegate unit will be automatically switched off.

4.4.3.2 AUTO –OFF：99 Sec ⇨ **99** sec later if not speaking, the delegate unit will be automatically switched off.

4.4.3.3 AUTO –OFF：Invalid ⇨ the delegate unit should be manually switched off by pressing the “TALK” button

4.5【Save】Settings

4.5.1 When all above settings finished, if you want to save them as default value, you only need to push “SAVE” button. When it’s done, the saved setting is permanent. Power failures of switching off do not clear the default value.

4.5.2 When “SAVE” button is pressed, the LCD will be displayed in the following information.

		S	a	v	e	.	.	.	.	.	.	.	.	O	K				

4.6 Speed Dome Camera Settings

4.6.1 Each Speed Dome has the function of Auto-Image Tracing & Positioning which can be set up from the main control unit. Each chairman/delegate unit could set up to16 Speed Domes which has 128 Programmable Preset Positions of each camera.

4.6.2 Press ”MODE” button ➙ move “▫” to SPEED DOME SETTING mode（the 2nd page of the MENU）➙（）**ID code 001** displayed under **MIC** column ➙ press ”UP” or ”DN” button ➙ select the “ID code” of microphone

5	▫	S	P	E	E	D		D	O	M	E		S	E	T	T	I	N	G
		M	I	C				D	O	M	E				A	D	R		
	(	0	0	1	)				0	1					0	0	1		

4.6.3 The conference system totally has **1,009 groups of ID codes**.

4.6.3.1 ID code of delegate unit: 999 groups of numbers from 001 ~ 999

4.6.3.2 ID code of chairman unit: 10 groups of numbers from ＊＊1 ~ ＊10

4.6.4 When “ID code” of microphone has been selected ➙ press ”STEP” button ➙ move to right side to **ID code 001** under DOME column ➙（）**ID code 01** displayed under **DOME** column ➙ press ”**UP**” or ”**DN**” button ➙ select the “**ID code**” of IP Speed Dome (See the Appendix – ID Codes of Speed Dome camera)

5	▫	S	P	E	E	D		D	O	M	E		S	E	T	T	I	N	G
		M	I	C				D	O	M	E				A	D	R		
		0	0	1				(	0	1	)				0	0	1		

4.6.5 One main control unit can control 16 speed domes cameras. **No. 01 ~ 16** is the” **ID code**” of these **16** speed dome cameras.

4.6.6 When “ID code” of speed dome has been selected ➙ press ”STEP” button ➙ move to right side to **ID code 001** under ADR column ➙（）**ID code 01** displayed under **ADR** column ➙ press ”**UP**” or ”**DN**” button ➙ select the “**Programmable Preset Positions**” of Speed Dome.

5	◘	S	P	E	E	D		D	O	M	E		S	E	T	T	I	N	G
		M	I	C				D	O	M	E				A	D	R		
		0	0	1					0	1				(	0	0	1	)	

4.6.7 Each speed dome has 128 Programmable Preset Positions.

4.6.7.1 When the figure under **ADR** column displayed **001**, it is the 1st Programmable Preset Positions.

4.6.7.2 When the figure under **ADR** column displayed **OFF**, the function of Auto-Image Tracing & Positioning is disabled.

4.6.8 When above three steps finished setting ➞press **"SAVE "** button to save the setting value of the speed dome camera➞ When "SAVE" button is pressed, the LCD will be displayed in the following information.

		S	a	v	e	.	.	.	.	.	.	.	.	O	K			

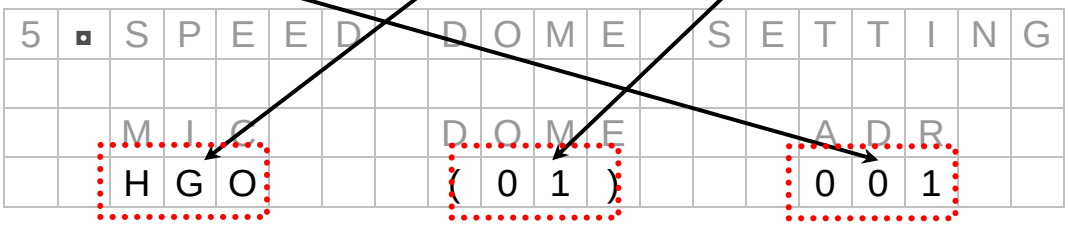
4.6.9 Now, the picture in LCD will be back to item **4.6.2**. Repeat the above setting steps for other conference unit.

4.6.10 The Programmable Preset Position is the 128th of ID address and the 1st ID code of the IP speed dome. It is mainly used to turn the IP speed dome automatically to the 128th conference preset position when there is no using microphone.

4.6.11 Auto-return **(HGO)**

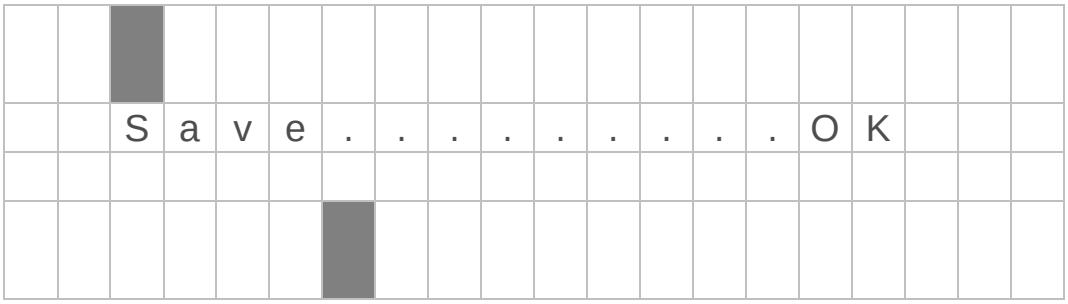
After setting, the camera will shoot the preset point (the whole meeting area or at the chairman) when none microphone is in use.

Press "MODE" button ➙ switch "◘" to SPEED DOME SETTING (the second page) ➙ ( ) will be shown below MIC ➙ press "UP" or "DN" button and select HGO ➙ select camera number under DOME ➙ select camera position under ADR.



(The position of Auto-return {HGO} can be set at any {ADR} of any {DOME}).

After above setting is done ➙ it is a must-do to press ”SAVE ” button to save the setting value of speed dome camera (or the setting won’t be modified) ➙ LCD displays follow information.



4.7 Speed Dome Camera Mode Settings

4.7.1 Auto-Image Tracing & Positioning Control Mode

4.7.1.1**" None" mode:** Auto-Image Tracing & positioning is disabled.

4.7.1.2**" Button" mode:** The speed dome will be tracing & positioning the image while the "TALK" button is being pressed. The images of Speed Dome will be positioned to the last talking microphone. By pressing the "TALK" button, the chairman or delegates could have the images of positioned again

4.7.1.3 **"Voice" mode:** The speed dome will not only be tracing & positioning the image while the "TALK" button is being pressed for the first time but also it will be tracing & positioning the image automatically where the voice coming from.

4.7.2 How to Operate:

4.7.2.1 Press "**MOD**E" button → move " ◘ " to SPEED DOME MODE（the 3rd of the MENU）→ the previous settings will be displayed on the LCD → press "STEP" button → select mode → Save

6	◘	S	P	E	E	D		D	O	M	E		M	O	D	E		
(	N	o	n	e	)		B	u	t	t	o	n		V	o	i	c	e

4.8 Mic Checking Mode Settings

4.8.1 After the installation is completed, you have to execute the "Scan" functions first, and then the system will be automatically scanned and detected all the microphones. The numbers of microphones and their ID codes will be recorded in the system. Now, the first self-detecting action is completed.

4.8.2 How to Operate:

4.8.2.1 Press **"MODE"** button → move " ◘ " to **7**. **MIC CHECKING MODE**（the 4th page of the MENU）→ It will be showed as following:

7	◘	M	I	C		C	H	E	C	K	I	N	G		M	O	D	E	
			(	T	e	s	t	)				S	c	a	n				

➝ Press ”**STEP**” button ➝ move（）to “**Scan**” ➝ press ”**SAVE**” button.

7	◘	M	I	C		C	H	E	C	K	I	N	G		M	O	D	E	
				T	e	s	t				(	S	c	a	n	)			

➝ The following display will be lasted about 30 sec.

				E	R	A	S	E		M	E	M	O	R	Y				
				P	L	E	A	S	E		W	A	I	T	.				

➝ After that, FCS3000/6000 will start checking all microphone’s ID installed. It will take about 60 seconds.

C	H	E	C	K	I	N	G		M	I	C		:				□	□	□
M	I	C		C	O	U	N	T	E	R		:					□	□	□
E	R	R	O	R		:													

CHECKING MIC（Checking correct microphone ID）：Delegate’s ID: 000~999, Chairman ID:＊01~＊10.

MIC COUNTER（All microphone installed）：000~1009。

ERROR（Error MIC ID Code）：Under scanning, no ID code will be displayed.

4.8.2.2 During MIC CHECKING MODE, chairman and delegate’s LCD will also shows the scan status.

4.8.2.3 After confirming the above operations correctly, Press ”**MODE**” button ➝ move ” ◘ ” to “MIC CHECKING MODE” (the 4th page of the MENU)➝ It will be showed as following:

7	◘	M	I	C		C	H	E	C	K	I	N	G		M	O	D	E	
			(	T	e	s	t	)				S	c	a	n				

➝ Press”**SAVE**” button, checking time may be various depends on number of installed units

C	H	E	C	K	I	N	G		M	I	C		:				□	□	□
M	I	C		C	O	U	N	T	E	R		:					□	□	□
E	R	R	O	R		:	□	□	□		□	□	□		□	□	□		

CHECKING MIC (Checking correct microphone ID): Under "**Test**" status, it will test only those microphones connected.

MIC COUNTER（All microphone connected）: Under "**Test**" status, it will be displayed the number of microphones connected correctly

ERROR（Error MIC ID Code）: Under "**Test**" status, it will be displayed error ID codes.

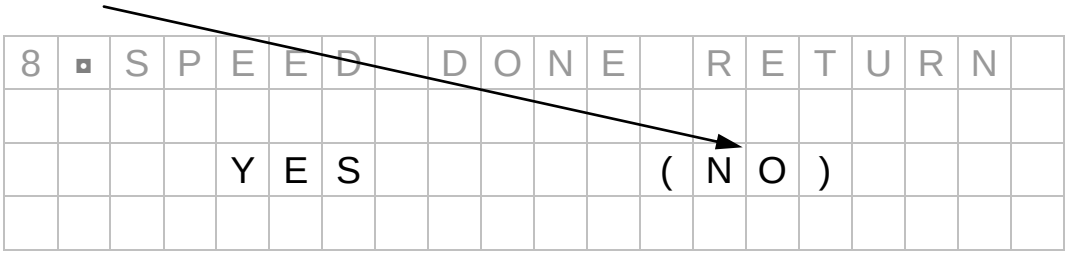
※If the numbers of microphones are increased or reduced, you have to repeat step 4.8.2.1, and then the system will be automatically scanned and detected all the microphones. The numbers of microphones and their ID code will be recorded in the system.

4.9. Speed Done Return

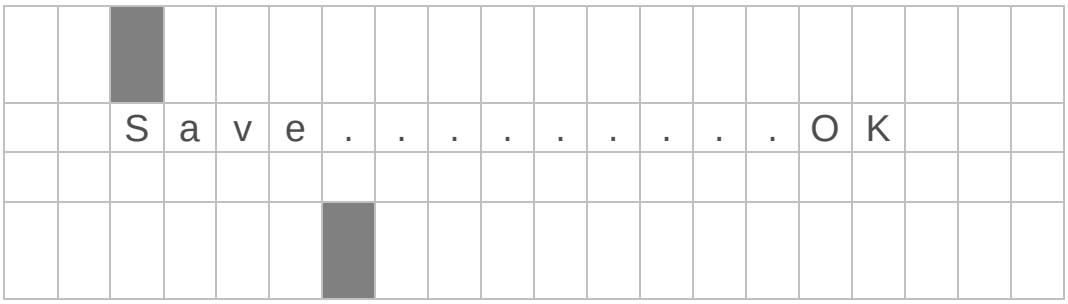
4.9.1 Activate/ deactivate speed dome camera auto-return (HGO) function. (Please refer to 4.6.11 for HGO setting.)

4.9.2 How to activate/ deactivate:

Press "MODE" button → switch "▫" to 8. SPEED DOME RETURN（on the 5th page） → ( ) will be shown beside NO → press "STEP" to switch YES/NO.



After above setting is done → it is a must-do to press "SAVE " button to save the setting value of speed dome camera (or the setting won't be modified) → LCD displays follow information.

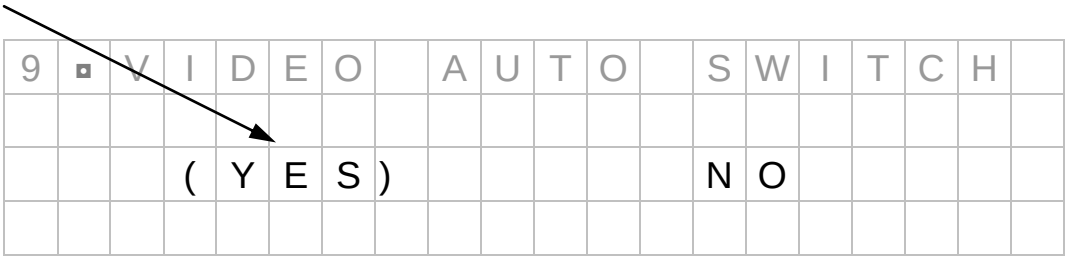


4.10. Video Auto Switch

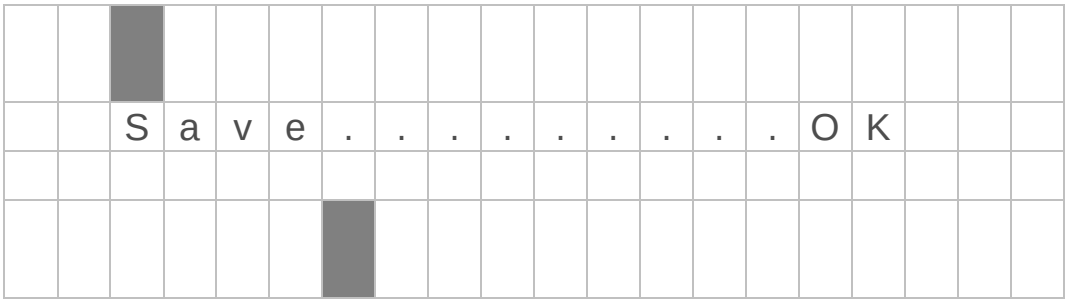
4.10.1 Multi-image overcome display switch: with a multiplexer, images from multi-camera can run auto-overcome display.

4.10.2 Setting:

Press “MODE” button ➞ switch ” ▫” to 9. VIDEO AUTO SWITCH（on the 6th page） ➞ ( ) will be shown beside YES ➞ press “STEP” to switch YES(auto-overcome)/NO(shown with divided screen).



After above setting is done ➞ it is a must-do to press ”SAVE ” button to save the setting value of speed dome camera (or the setting won’t be modified) ➞ LCD displays as below.



4.11 Voting Mode Settings

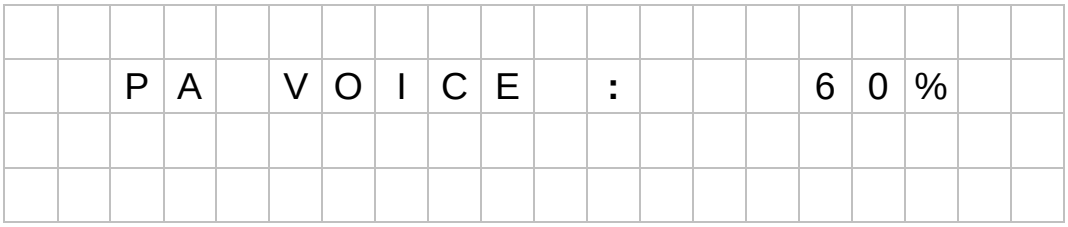
4.11.1 This series has the “Voting” mode. There are two following methods of operating this function:

4.11.1.1 Chairman Microphone equipped with LCD can execute the voting functions with registered or ballot. The voting results of ballot will be displayed on the equipped LCD Chairman/ Delegate Microphone. On the contrast, you need to have “FCS 6170 Graphic Control Software” to display the voting results of registered.（Please refer the following MIC unit instruction for detailed operations）

4.11.1.2 To execute the “Voting” function with registered or ballot need to be connected with “Graphic Control Software.” （Please refer to Graphic Control Software Operating Instructions）

4.12 Volume Mode Settings

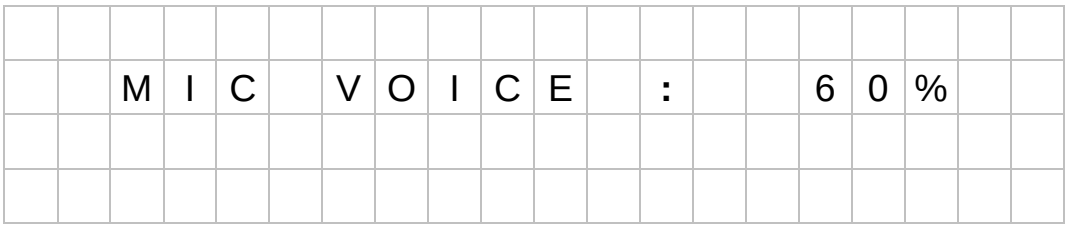
To set up the volume of PA system, please press the “UP” button▲ or ”Down” button▼ on the left side of the five functional buttons, the LCD will be showed as following:



Note: After 3 seconds of pressing the button, the LCD will be automatically returned to the “MENU” page and save the settings automatically.

4.13 MIC Volume Mode Settings

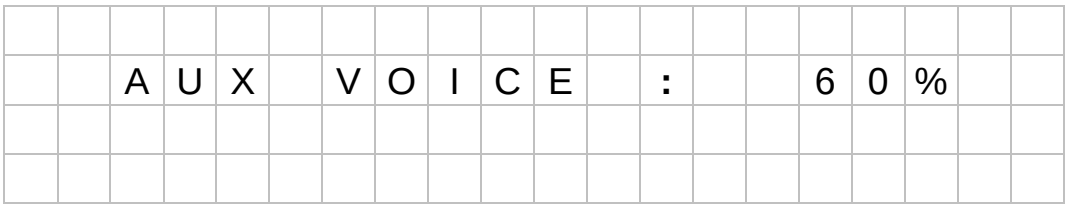
To Adjust the volume of the microphone connected to the microphone input jack, please press the **MIC “UP**” button▲ or ”**Down**” button▼, the LCD will be showed as following:



Note: After 3 seconds of pressing the button, the LCD will be automatically returned to the “MENU” page and save the settings automatically.

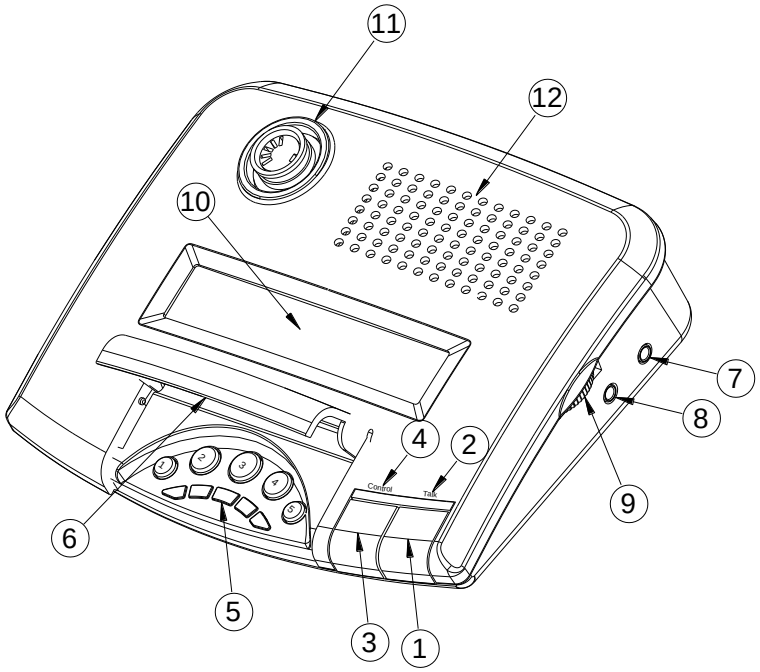
4.14 AUX Volume Mode Settings

To adjust the volume of the equipment connected to the AUX input jack, please press the AUX “UP” button▲ or ”Down” button▼, the LCD will be showed as following:



Note: After 3 seconds of pressing the button, the LCD will be automatically returned to the “MENU” page and save the settings automatically.

Table-Top Delegate Mic CS-200DU Unit



◯,1 ➝ Talk Button

◯,2 ➝ Talk Indicator lamp

◯,3 ➝ Status Indicator lamp

◯,4 ➝ Voting/Control Button & Indicator lamp

◯,5 ➝ Voting Case Cover

◯,6 ➝ Record Output Jack

◯,7 ➝ Earphone Output Jack

◯,8 ➝ Earphone Volume Control

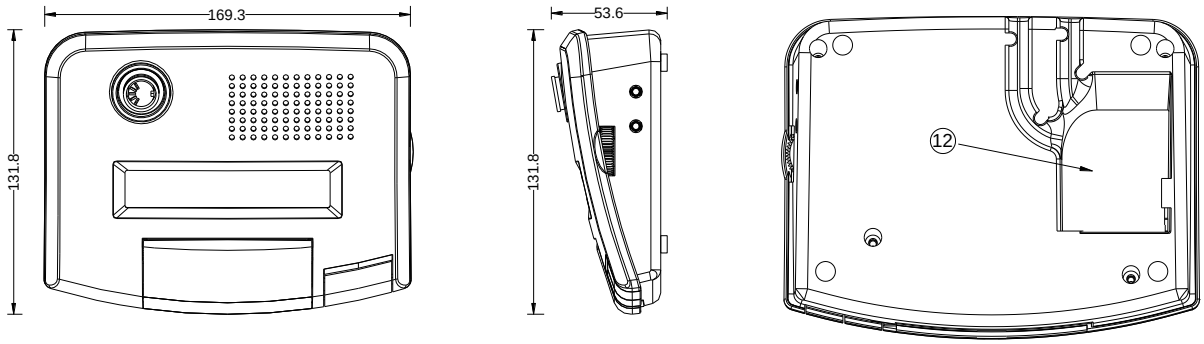
◯,9 ➝ LCD

◯,10 ➝ MIC Jack

◯,11 ➝ Built-In Speaker

◯,12 ➝ Hidden Wiring Slot

Functions：



1. CS-200DUB does not have LCD screen, the rest function is as same as CS-200DU.

1.1 Power On：All the LCDs (including Chairman/Delegate MIC) will be displayed as following when the power is on; it means the connection is ok. You can press any button of the microphone or wait until 30 sec to another preset picture.

					W	e	l	c	o	m	e		t	o		B	X	B					
		C	o	n	f	e	r	e	n	c	e		P	A		S	y	s	t	e	m		

1.2 Preset Picture

1		N	O	:		N	o		M	i	c											
2		M	O	D	E	:		N	o	r	m	a	l									

1. NO：MIC ID Code (including MIC in use/request/line-up)
2. MODE：Mode In Use（Please refer the main control unit instructions for Mode functions）

2. Press Talk button, when the indicator lamp of Talk and microphone is on, talking can begin.

3. Lamp color definition of conference mode status.

Red Light On：**Chairman Mode**

Orange Light On： **FIFO Mode**

Green Light On： **Override Mode**

4. **Chairman Mode:** While pressing the “TALK” button by the chairman, the ring of LED and talk indicator lamp of delegate microphones are flashing with RED color, once the chairman permits speaking, and the ring of LED will be automatically turned to red color without flashing, the delegates can speak now.

5. **FIFO Mode:** The 1st prepared speaker will see his microphone’s LED ring and talk indicator lamp start flashing with **RED** color, once the last one finished speaking; all the lamps will be automatically turned to **red** color without flashing. Now it’s his turn. The 2nd prepared speaker and next ones will see their microphone’s LED rings and talk indicator lamps start flashing with **ORANGE** color, once the 1st prepared speaker finished speaking, the lamps of the 2nd one will be automatically turned to **orange** color without flashing, and so on.

6. Execute voting function— this function can be enabled only when the chairman main control unit is configured with graphic control software. The voting buttons are hidden in the voting cabin, which can be opened while voting is required. When voting is finished, the cabin can be covered to maintain the simple and grace appearance of the conference microphones.

6.1 The definition of each button is as follows:

6.1.1 Voting Mode: ◯,1:Yes ◯,2: No ◯,3◯,4◯,5: Abstain

6.1.2 Electing Mode: ◯,1: 1 ◯,2:2 ◯,3:3 ◯,4:4 ◯,5:5

6.1.3 ◯,1: ++（Strongly agree） ◯,2: +（Agree） ◯,3: 0（No opinion）

◯,4:-（Disagree） ◯,5:- -（Strongly Disagree）

6.2 Two ways of Voting: Registered or Ballot

6.2.1 **Registered:**

6.2.1.1 Before voting, five lamps will be on simultaneously, which mean the voting can be executed. Press the button you want and the corresponding red lamps will be constantly on which indicate the voting is successful. When voting is stopped, all five lamps will be start flashing which indicate the system is calculating the votes, once the calculation is finished, it will stop flashing.

6.2.1.2 The voting results and voter’s selection could be seen on the LCD of CS-200CU/DU Graphic Control Software. Only can the LCD of chairman/delegate display as followings:

T	:	x	x	x		A	:	x	x	x		1	:	x	x	x		2	:	x	x	x	

3	:	x	x	x		4	:	x	x	x		5	:	x	x	x							

【T：Total voters】 【A：Abstained voters】 【1：Voters for No.1】 【2：Voters for No.2】 【3：Voters for No.3】 【4：Voters for No.4】 【5：Voters for No.5】

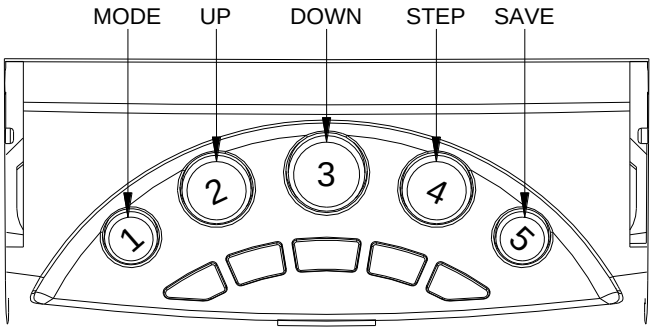
6.2.2Ballot:

6.2.2.1 Before voting, five lamps will be on simultaneously, which mean the voting can be executed. For strengthening the confidentiality, when you press the button, the corresponding red lamps will be flashing twice and then disappeared immediately which indicate the successful voting. When voting is stopped, all five lamps will be start flashing which indicate the system is calculating the votes, once the calculation is finished, it will stop flashing.

6.2.2.2 The voting results could be seen on the LCD of Graphic Control Software and the LCD of chairman/delegate display, only the voter's selection cannot be seen. Before all the five lamps flashing, the selection can be changed.

7. Chairman Multi-Functional Control Button: The functions and operations are as same as the main control unit.

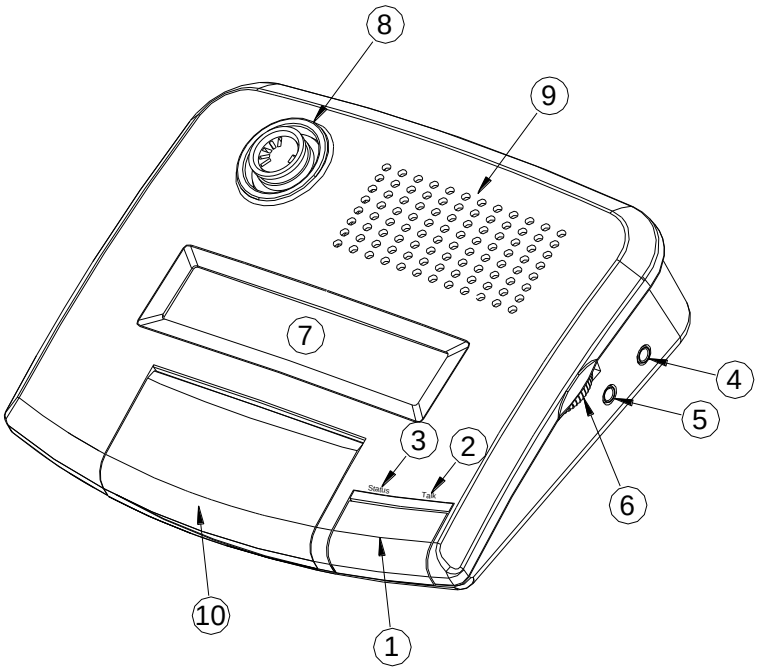
8. LCD can display the MIC ID Code (including MIC in use/request/line-up) and the conference mode.



9. The gooseneck microphones are separate with the stand to facilitate the installation, repair and maintenance in general condition as well as the transportation, storage and assembly.

10. Hidden wiring is adopted with Y-shaped fast cord. There is a hidden configuration slot for connector in the stand. Holes can be drilled under the stand when installed, which will enable hidden wiring and maintain the appearance of the conference hall nice and neat.

Table-Top Delegate Mic- CS-200DU Unit



◯,1 ➝ Talk Button

◯,2 ➝ Talk Indicator lamp

◯,3 ➝ Control Indicator lamp

◯,4 ➝ Record Output Jack

◯,5 ➝ Earphone Output Jack

◯,6 ➝ Earphone Volume Control

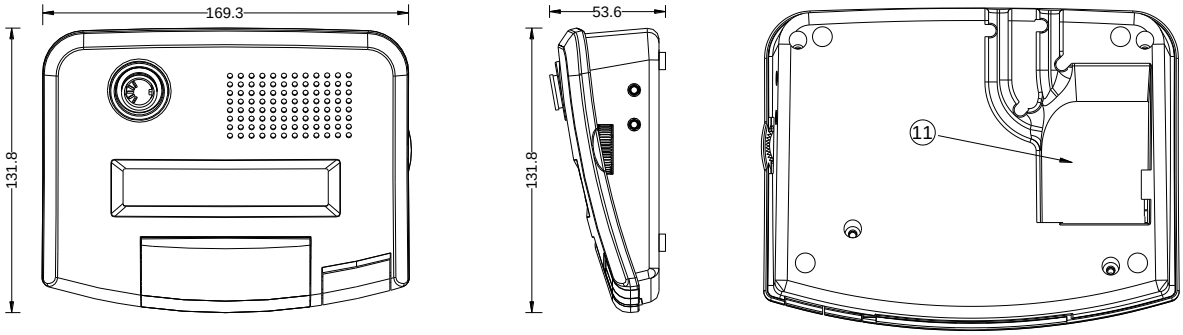
◯,7 ➝ LCD

◯,8 ➝ MIC Jack

◯,9 ➝ Built-In Speaker

◯,10 ➝ Voting Function Case

◯,11 ➝ Hidden Wiring Slot



Functions:

1. CS-200DUB does not have the LCD screen, but the rest functions are as same as CS-200DU.

1.1 Power On “Welcome” Picture：All the LCDs (including Chairman/Delegate MIC) will be displayed as following when the power is on; it means the connection is ok. You can press any button of the microphone or wait until 30 sec to another preset picture.

					W	e	l	c	o	m	e		t	o		B	X	B					
		C	o	n	f	e	r	e	n	c	e		P	A		S	y	s	t	e	m		

1.2 Preset Picture

1		N	O	:		N	o		M	i	**c**											
2		M	O	D	E	:		N	o	r	m	a	l									

1. NO：MIC ID Code (including MIC in use/request/line-up)
2. MODE：Mode In Use（Please refer the main control unit instructions for Mode functions）.

2. Press Talk button, when the indicator lamp of Talk and microphone is on, talking can begin.
3. Lamp color definition of conference mode status.

3.1 Red Light On：Chairman Mode

3.2 Orange Light On： FIFO Mode

3.3 Green Light On： **Override Mode**

4. **Chairman Mode:** While pressing the “TALK” button by the chairman, the ring of LED and talk indicator lamp of delegate microphones are flashing with RED color, once the chairman permits speaking, and the ring of LED will be automatically turned to red color without flashing, the delegates can speak now.

5. **FIFO Mode:** The 1st prepared speaker will see his microphone’s LED ring and talk indicator lamp start flashing with **RED** color, once the last one finished speaking; all the lamps will be automatically turned to **red** color without flashing. Now it’s his turn. The 2nd prepared speaker and next ones will see their microphone’s LED rings and talk indicator lamps start flashing with **ORANGE** color, once the 1st prepared speaker finished speaking, the lamps of the 2nd one will be automatically turned to **orange** color without flashing, and so on.

6. Execute voting function— this function can be enabled only when the chairman main control unit is configured with graphic control software. The voting buttons are hidden in the voting cabin, which can be opened while voting is required. When voting is finished, the cabin can be covered to maintain the simple and grace appearance of the conference microphones.

a.The definition of each button is as follows:

b.Voting Mode: ◯,1:Yes ◯,2: No ◯,3◯,4◯,5: Abstain

c. Electing Mode: ◯,1: 1 ◯,2:2 ◯,3:3 ◯,4:4 ◯,5:5

d. ◯,1: ++（Strongly agree） ◯,2: +（Agree） ◯,3: 0（No opinion）◯,4:-（Disagree） ◯,5:- -（Strongly Disagree）

Two ways of Voting: **Registered** or **Ballot**

- **Registered:**

Before voting, five lamps will be on simultaneously, which mean the voting can be executed. Press the button you want and the corresponding red lamps will be constantly on which indicate the voting is successful. When voting is stopped, all five lamps will be start flashing which indicate the system is calculating the votes, once the calculation is finished, it will stop flashing.

The voting results and voter’s selection could be seen on the LCD of FCS 6170 Graphic Control Software. Only can the LCD of chairman/delegate display as followings:

T	:	x	x	x		A	:	x	x	x		1	:	x	x	x		2	:	x	x	x	
3	:	x	x	x		4	:	x	x	x		5	:	x	x	x							

【T：Total voters】 【A：Abstained voters】 【1：Voters for No.1】 【2：Voters for No.2】

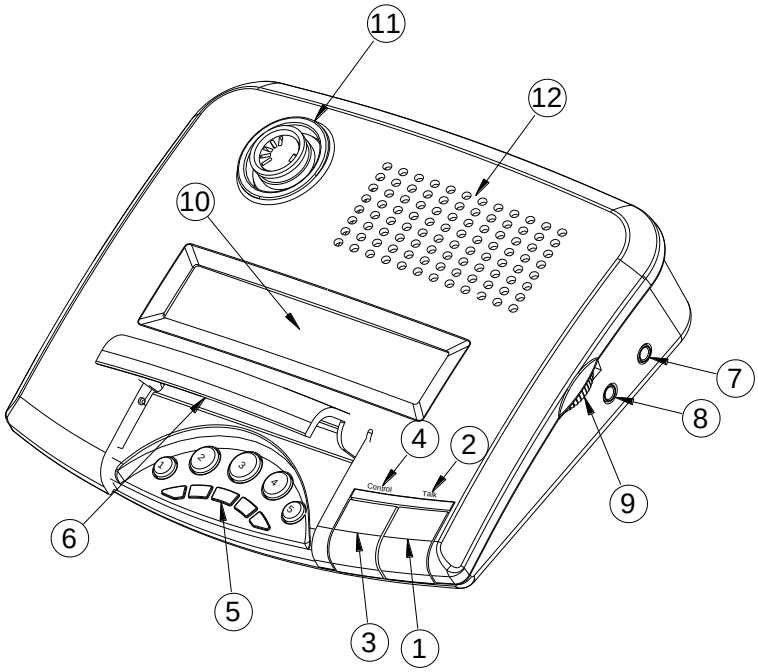
【3：Voters for No.3】 【4：Voters for No.4】 【5：Voters for No.5】

- **Ballot:**

Before voting, five lamps will be on simultaneously, which mean the voting can be executed. For strengthening the confidentiality, when you press the button, the corresponding red lamps will be flashing twice and then disappeared immediately which indicate the successful voting. When voting is stopped, all five lamps will be start flashing which indicate the system is calculating the votes, once the calculation is finished, it will stop flashing.

7. The voting results could be seen on the LCD of Graphic Control Software and the LCD of chairman/delegate display, only the voter's selection cannot be seen. Before all the five lamps flashing, the selection can be changed.
8. LCD can display the MIC ID Code (including MIC in use/request/line-up) and the conference mode.
9. The gooseneck microphones are separate with the stand to facilitate the installation, repair and maintenance in general condition as well as the transportation, storage and assembly.
10. Hidden wiring is adopted with CS-200YC fast cord. There is a hidden configuration slot for connector in the stand. Holes can be drilled under the stand when installed, which will enable hidden wiring and maintain the appearance of the conference hall nice and neat.

Table-Top Chairman Mic- CS-200CU Unit



◯,1 → Talk Button

◯,2 → Talk Indicator lamp

◯,3 → Chairman Control Button

◯,4 → Status Indicator lamp

◯,5 → Voting/Control Button & Indicator lamp

◯,6 → Voting Case Cover

◯,7 → Record Output Jack

◯,8 → Earphone Output Jack

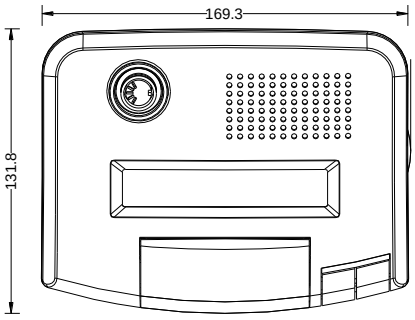
◯,9 → Earphone Volume Control

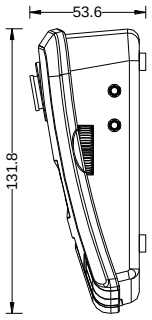
◯,10 → LCD

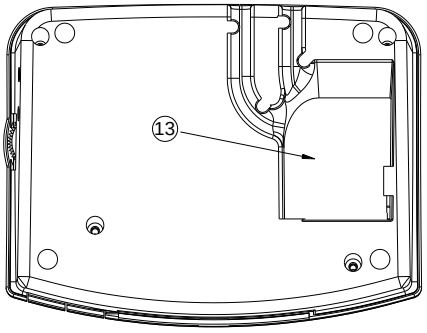
◯,11 → MIC Jack

◯,12 → Built-In Speaker

◯,13 → Hidden Wiring Slot







Functions：

1.1 Power On “Welcome” Picture：All the LCDs (including Chairman/Delegate MIC) will be displayed as following when the power is on; it means the connection is ok. You can press any button of the microphone or wait until 30 sec to another preset picture.

					W	e	l	c	o	m	e		t	o		B	X	B					
		C	o	n	f	e	r	e	n	c	e		P	A		S	y	s	t	e	m		

1.2 Preset Picture

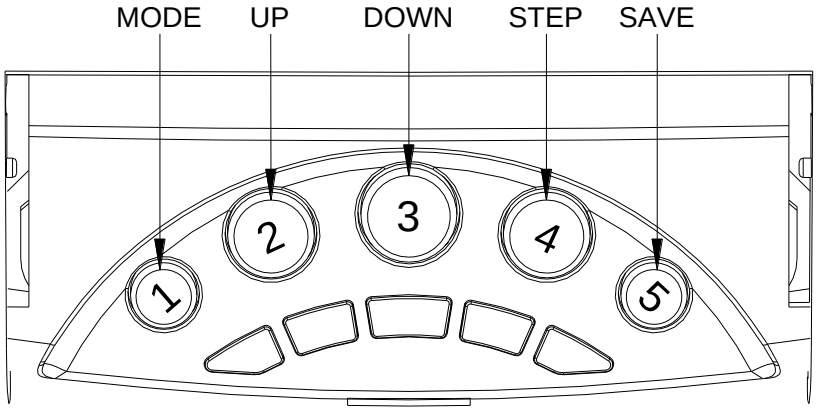
1		N	O	:		N	o		M	i	c											
2		M	O	D	E	:		N	o	r	m	a	l									

1 NO: MIC ID Code (including MIC in use/request/line-up)

2 MODE: Mode In Use（Please refer the main control unit instructions for Mode functions）.

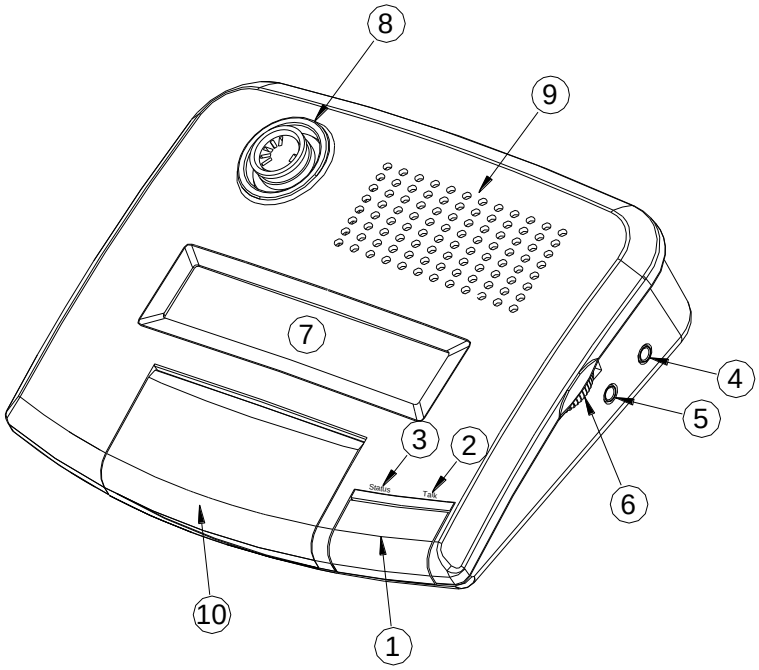
2. Press Talk button, when the indicator lamp of Talk and microphone is on, talking can begin.
3. Clear all delegate talking－press Control button to clear all the delegates.

4. Lamp color definition of conference mode status.
   4.1 Red Light On：**Chairman Mode**
   4.2 Orange Light On： **FIFO Mode**
   4.3 Green Light On： **Override Mode**
5. **Chairman Mode:** Press “Control” button for three seconds until the red LED above the Control button is on and the MODE on the LCD displays Chairman and the chairman mode can be executed; vice verse, press Control button again for three seconds until the red LED above the Control button is off, it will resume to normal talking status.
6. **Chairman Multi-Functional Control Button:** The functions and operations are as same as the main control unit.



7. LCD can display the MIC ID Code (including MIC in use/request/line-up) and the conference mode.
8. The gooseneck microphones are separate with the stand to facilitate the installation, repair and maintenance in general condition as well as the transportation, storage and assembly.
9. Hidden wiring is adopted with CS-200YC. There is a hidden configuration slot for connector in the stand. Holes can be drilled under the stand when installed, which will enable hidden wiring and maintain the appearance of the conference hall nice and neat.

Table-Top Delegate Mic- CS-200DU Unit



◯,1 → Talk Button

◯,2 → Talk Indicator lamp

◯,3 → Control Indicator lamp

◯,4 → Record Output Jack

◯,5 → Earphone Output Jack

◯,6 → Earphone Volume Control

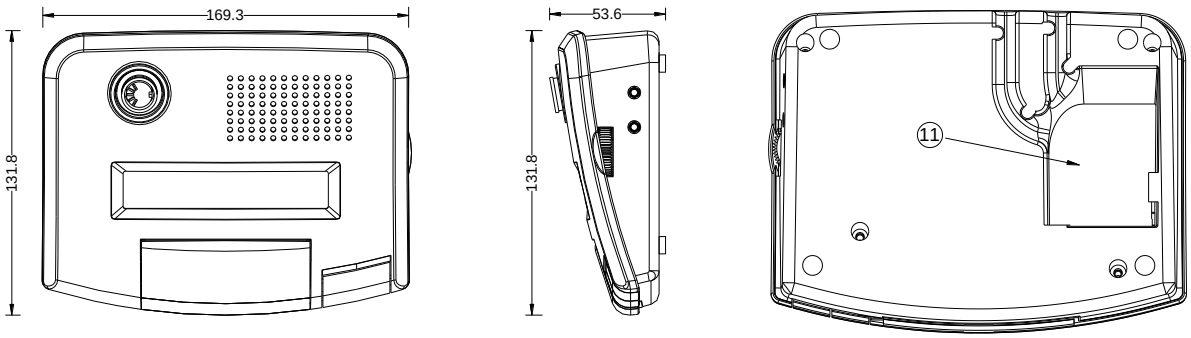
◯,7 → LCD

◯,8 → MIC Jack

◯,9 → Built-In Speaker

◯,10 → Voting Function Expanded Case

◯,11 → Hidden Wiring Slot



Functions:

1. CS-200DUB does not have the LCD screen, but the rest functions are as same as CS-20DU.

1.1 Power On “Welcome” Picture：All the LCDs (including Chairman/Delegate MIC) will be displayed as following when the power is on; it means the connection is ok. You can press any button of the microphone or wait until 30 sec to another preset picture.

					W	e	l	c	o	m	e		t	o		B	X	B				
		C	o	n	f	e	r	e	n	c	e		P	A		S	y	s	t	e	m	

1.2 Preset Picture

1		N	O	:		N	o		M	i	**c**											
2		M	O	D	E	:		N	o	r	m	a	l									

1 NO：MIC ID Code (including MIC in use/request/line-up)

2 MODE：Mode In Use（Please refer the main control unit instructions for Mode functions）.

2. Press Talk button, when the indicator lamp of Talk and microphone is on, talking can begin.
3. Lamp color definition of conference mode status.

   3.1 Red Light On：**Chairman Mode**

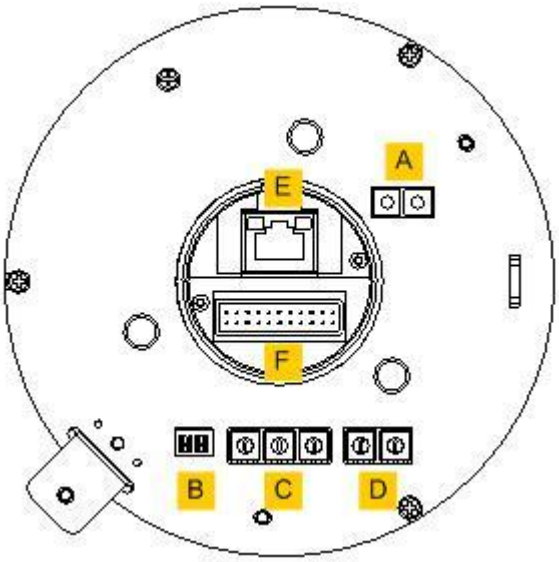
   3.2 Orange Light On： **FIFO Mode**

   3.3 Green Light On： **Override Mode**
4. **Chairman Mode:** While pressing the “TALK” button by the chairman, the ring of LED and talk indicator lamp of delegate microphones are flashing with RED color, once the chairman permits speaking, and the ring of LED will be automatically turned to red color without flashing, the delegates can speak now.
5. **FIFO Mode:** The 1st prepared speaker will see his microphone’s LED ring and talk indicator lamp start flashing with **RED** color, once the last one finished speaking; all the lamps will be automatically turned to **red** color without flashing. Now it’s his turn. The 2nd prepared speaker and next ones will see their microphone’s LED rings and talk indicator lamps start flashing with **ORANGE** color, once the 1st prepared speaker finished speaking, the lamps of the 2nd one will be automatically turned to **orange** color without flashing, and so on.
6. LCD can display the MIC ID Code (including MIC in use/request/line-up) and the conference mode.
7. The gooseneck microphones are separate with the stand to facilitate the installation, repair and maintenance in general condition as well as the transportation, storage and assembly.
8. Hidden wiring is adopted with CS-200YC. There is a hidden configuration slot for connector in the stand. Holes can be drilled under the stand when installed, which will enable hidden wiring and maintain the appearance of the conference hall nice and neat.

Appendix. Speed Dome Basic Setting

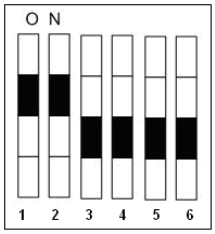
1.1 Power On & Off

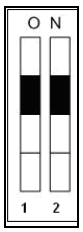
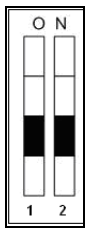
Before the speed dome connects with other equipments, user has to complete the related settings of IP address and protocols. Please see the following pictures:



A	Reserved port
B	Communication Switch
C	IP Address Switch
D	Protocol Switch
E	RJ-45 connecting port (for Speed Dome)
F	Data Transmission Connector (22-Pin Connector)

1.2 Telecom On& Off

Communication Switch	Pin 1	RS-485 Communication Setting
	Pin 2	
	Pin 3	Termination
	Pin 4	Line Lock
	Pin 5	System Initialization (for upgrade)
	Pin 6	Reserved

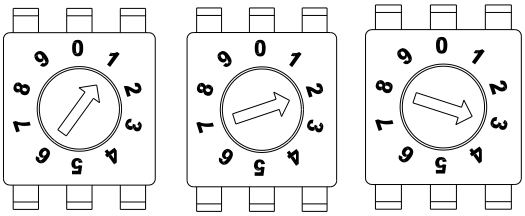
RS-485 Communication Setting	
Half Duplex	Full Duplex
	

The factory setting of RS-485 is Half-Duplex.

Note: Do not change the settings without the instructions of professional technicians.

1.3 IP Address

IP address can be adjusted by the arrow on the switch. For example, IP address is”123.” Please adjust it with the order of Percentile (1), Decile (2) and Unit (3). Please see it as following:



Percentile Decile Unit

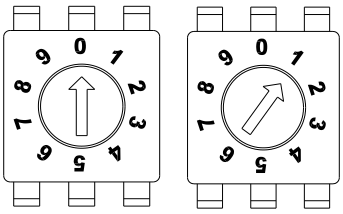
(1)Please do not set up the identical IP address of two Speed Domes to avoid communication collisions.

(2)While adjusting the IP address, please make sure “0(Zero)” is in the north.

2.1 Telecom Protocol

Switch No.	Protocol	Baud Rate
00	VCL	9600
01	Pelco D	2400
02	Pelco P	4800
04	Chiper	9600
05	Philips	9600
07	BXB	9600
08	AD422	4800
09	DM P	9600
11	Pelco D	4800
12	Pelco D	9600
13	Pelco P	2400
14	Pelco P	9600
15	JVC	9600
16	GANZ	9600

For example, if your protocol is “Pelco D”, the baud rate is 2400, Switch no is 01, and the setting is as follows:

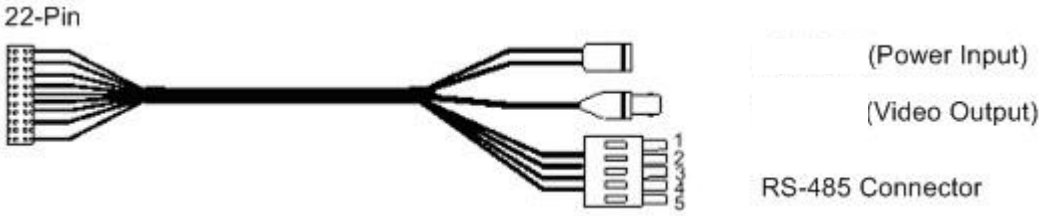


2.2 Definition of Data Transmission Cord

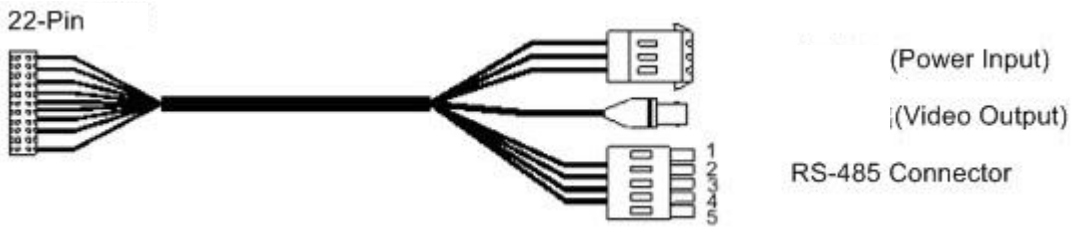
For user’s convenient fast installation and test, this IP Speed Dome contains a 50 centimeters data transmission cord; Data transmission cord varies depend on the product models(DC 12V or AC 24V).

Please refer to the following pictures:

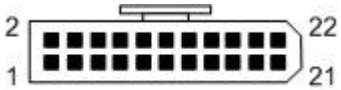
Data Transmission Cord: DC 12V



Data Transmission Cord: AC 24V



Please see the following **22-Pin DefinitionTable** as connecting referenece.



Pin	Definition	AWG
1	AC24-1/DC GND	20AWG
2	Alarm Pin (Not wired)	
3	AC24-2/DC12 (+)	20AWG
4	Alarm Pin (Not wired)	
5	FG	20AWG
6	Alarm Pin (Not wired)	
7	T+	24AWG
8	R-	
9	T-	
10	R+	
11~20	Alarm Pin (Not wired)	
21	Video GND Cable	24AWG
22	Video Cable	

RS-485 is the communication interface between IP Speed Dome and control keyboard; If 24-gauge cord is adopted to use, the maximum length of cable is 4000 feet (1219 meters). Twisted Pair Cable is recommended.



If the unit is to be put out of operation definitively, take it to a local recycling plant for a disposal which is not harmful to the environment.



Do not put exhausted batteries into the household rubbish. Always take them to a special waste disposal (e. g. collecting container at your retailer).

